

BLOW HOT BLOW COLD

KEY POINTS

- ✚ We are constantly taking in air and giving out air from our Nose.
- ✚ All Animals and Humans breath in oxygen rich air and breathe out carbon dioxide rich air during the process of breathing.
- ✚ We need Oxygen to live. It is found in the air around us. Oxygen is needed to breakdown digested food.

Answer the following

Give reason:

1. We breathe out clouds of mist from our mouth on a cold day.



When we breathe out, water vapour in our breath condenses as it comes in contact with the cold air of the atmosphere and mist is formed.

2. How does our breath help to warm our hands in winter?



In winter our hands become very cold. We open our mouth wide and blow on to our hands the warm, moist air inside our mouth. The steam of our breath makes our hands warm in winter.

3. Why do we see drops of water in our bathroom mirror, while taking hot water bath?



From the hot water, water vapour rises up and condenses on the cool surface of the mirror and forms water drops.

4. Why does hot milk become cool when we blow our air from our mouth?



The water vapour in the air we breathe out makes the heat coming out of the hot milk or soup escape faster. We often blow air with our lips puckered to cool a hot cup of milk or soup.

5. Why do we blow at a burning fire?



When we blow at a burning fire, the fire burns better because our breath contains more oxygen.

6. Explain the following terms.

- i. Breathing
- ii. Inhaling
- iii. Exhale

Breathing



Breathing is an activity that we do through out our lives. We start breathing right from the moment, we are born and continue doing so till we die. It is a process that continues automatically. We breathe even when we are sleeping. Breathing is a natural process of inhaling oxygen and exhaling carbon dioxide.

Inhaling



When we breathe in , our lungs expand and take in oxygen into the body.

Exhale



When we breathe out, the lungs contract and remove carbon dioxide.

7. Describe an activity to show that the air we breathe out contains water vapour.



When we stand in front of a mirror we see our image. And when we breathe out air over the surface of the

mirror we could notice that our image gets blurred. This is because of the water vapour in the air we breathe out. This water vapour condenses on the cool surface of the mirror. So we say that the air we breathe out contains water vapour.

8. Does the breathing rate change with our activities?



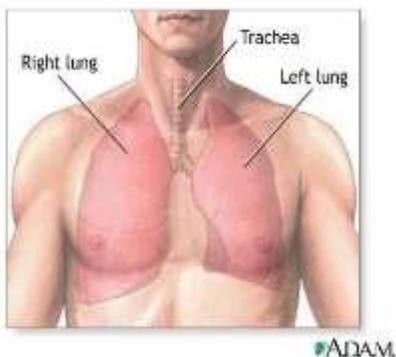
Yes, the rate of breathing is directly related to the kind of activities a person does. When a person is asleep or resting the rate of breathing becomes slow because the body does not require too much of energy and oxygen. when a person exercises, the breathing rate increases as the body requires more energy and oxygen.

9. What is a Stethoscope?



A Stethoscope is an instrument used by a doctor to listen to the sound of our heart beat and our breathing.

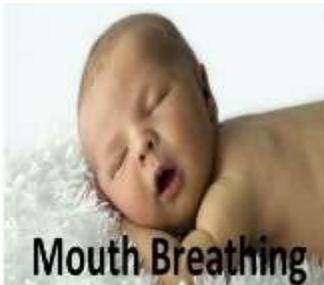
10. Draw and Explain: Lungs of Respiratory system



The air we breathe in contains oxygen which we need to live. The body produces waste materials such as carbon dioxide and watervapour. The wastes are thrown out from the body through the air we breathe out. Air that enters our body through the nose, passes through the windpipe and finally reaches the lungs located inside our chest.

Inside the lungs, the blood takes in the oxygen and gives our carbondioxide and watervapour or water.

11. What is the correct way of breathing?



Always breathe in air through the nose not from the mouth.

Never sleep with your face covered because the same air you are inhaling again and again.

Practice yoga and Pranayama. This helps in reducing stress.
